6DQ6-B

Beam Power Tube

GENERAL DATA

Electrical:

Heater, for Unipotential Cathode:			
Voltage (AC or DC)	6.3 ± 10%		volts
Current at 6.3 volts	1.2		amp
Mu-Factor, Grid No.2 to Grid No.1 for plate volts = 150, grid-No.2 volts = 150, grid-No.1 volts = -22.5	4.4		
Direct Interelectrode Capacitances (Approx.):[a]			
Grid No.1 to plate	0.5		μμf
Grid No.1 to cathode & grid No.3, grid No.2, and heater	15		μμf
Plate to cathode & grid No.3, grid No.2, and heater	7		μμf

Characteristics, Class A_1 Amplifier:

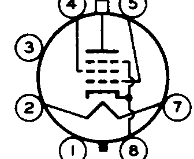
Plate Voltage	60	250	volts
Grid-No.2 Voltage	150	150	volts
Grid-No.1 Voltage	0	-22.5	volts
Plate Resistance (Approx.)	-	18000	ohms
Transconductance	-	7300	μmhos
Plate Current	345[b]	65	ma
Grid-No.2 Current	27[b]	1.8	ma
Grid-No.1 Voltage (Approx.) for grid-No.2 volts = 150, plate ma. = 1, plate volts =			
250	-	-42	volts
5000	-	-100	volts

Mechanical:

Operating Position	Any
Maximum Overall Length	4-1/4"
Seated Length	3-1/2" ± 3/16"
Diameter	1.438" to 1.562"
Bulb	T12
Cap	Skirted Miniature (JEDEC No.C1-3)
Base	Short Medium-Shell Octal 7-Pin with External Barriers, Style A, Arrangement 1 (JEDEC No.B7-111), Short Medium-Shell Octal 7-Pin with External Barriers, Style B, Arrangement 1 (JEDEC No.B7-119), Short Medium-Shell Octal 6-Pin with External Barriers, Style A, Arrangement 2 (JEDEC No.B6-148), or Short Medium-Shell Octal 6-Pin with External Barriers, Style B, Arrangement 2 (JEDEC No.B6-122)

Basing Designation for BOTTOM VIEW. 6AM

Pin 1[c] - No Connection
Pin 2 - Heater
Pin 3 - No Connection
Pin 4 - Grid No.2



Pin 5 - Grid No.1
Pin 7 - Heater
Pin 8 - Cathode, Grid No.3
Cap - Plate

HORIZONTAL-DEFLECTION AMPLIFIER

Maximum Ratings, *Design-Maximum Values:*

For operation in a 525-line, 30-frame system[d]

DC PLATE-SUPPLY VOLTAGE	770	max.	volts
PEAK POSITIVE-PULSE PLATE VOLTAGE[e]	6500	max.	volts
PEAK NEGATIVE-PULSE PLATE VOLTAGE	1500	max.	volts
DC GRID-No.2 (SCREEN-GRID) VOLTAGE	220	max.	volts
PEAK NEGATIVE-PULSE GRID-No.1 VOLTAGE	330	max.	volts
CATHODE CURRENT:			
Peak	610	max.	ma
Average	175	max.	ma
GRID-No.2 INPUT	3.6	max.	watts
PLATE DISSIPATION[f]	18	max.	watts
PEAK HEATER-CATHODE VOLTAGE:			
Heater negative with respect to cathode	200	max.	volts
Heater positive with respect to cathode	200[g]	max.	volts
BULB TEMPERATURE (At hottest point on bulb surface)	220	max.	°C

Maximum Circuit Values:

Grid-No.1-Circuit Resistance:			
For grid resistor-bias operation	1	max.	megohm

[a] Without external shield.

[b] This value can be measured by a method involving a recurrent wave form such that the maximum ratings of the tube will not be exceeded.

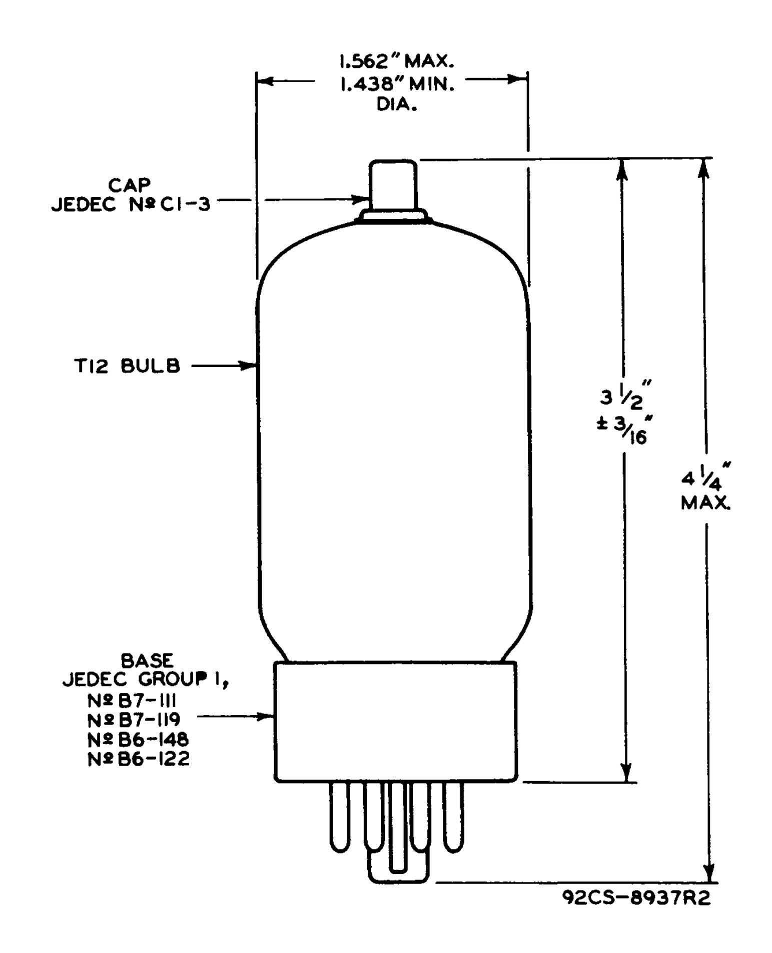
[c] On the 6-pin bases, pin 1 as well as pin 6 is omitted.

[d] As described in "Standards of Good Engineering Practice Concerning Television Broadcast Stations," Federal Communications Commission.

[e] This rating is applicable where the duration of the voltage pulse does not exceed 15 per cent of one horizontal scanning cycle. In a 525-line, 30-frame system, 15 per cent of one horizontal scanning cycle is 10 microseconds.

[f] An adequate bias resistor or other means is required to protect the tube in the absence of excitation.

[g] The dc component must not exceed 100 volts.


1.562" MAX.
1.438" MIN.
DIA.
CAP
JEDEC Nº C1-3
T12 BULB
3 1/2"
± 3/16"
4 1/4"
MAX.
BASE
JEDEC GROUP 1,
Nº B7-111
Nº B7-119
Nº B6-148
Nº B6-122
92CS-8937R2